

REMARKS

Summary of the Official Action

The Office Action rejects claim 20 under 35 U.S.C. §102(b) as being anticipated by Kurata et al. (U.S. Patent No. 4,307,276).

The Office Action also rejects claims 21, 26, 40, 42-43 and 45 under 35 U.S.C. §103(a) as being obvious over Kurata et al. in view of Dills (U.S. Patent No. 4,348,571).

The Office Action also rejects claims 22-23, 38 and 48-49 under 35 U.S.C. §103(a) as being obvious over Kurata et al. in view of Dills and further in view of Yamazaki et al. (U.S. Patent No. 6,371,017).

The Office Action also rejects claims 39 and 41 under 35 U.S.C. §103(a) as being obvious over Kurata et al. in view of Clothier (U.S. Patent No. 6,320,169).

The Office Action also rejects claim 44 under 35 U.S.C. §103(a) as being obvious over Kurata et al. in view of Dills and further in view of Chaput et al. (U.S. Patent No. 6,214,401).

The Office Action notes that claims 34-37, 46-47 and 50-51 would be allowable if rewritten in independent form.

By the present remarks, Applicant submits that the outstanding rejections are overcome for at least the reasons discussed below, and respectfully requests reconsideration of the outstanding Office Action.

Response

Basic features of the presently claimed invention:

- The device is a *grilling* device, where the food to be grilled is placed directly on the plate.
Any plate of a cooking stove, where a pan is put on the plate, is neither intended nor suited to have food placed directly thereon.
- The power to the induction coils is thermostatically regulated. Most power inputs are fixed according to different heating stages.
- Temperature measurement of the grilling plate is performed in a *contactless* manner.
There is no physical contact between, e.g., a thermostat and the grilling plate.

Advantages of a grilling plate with a thermostatic power regulation and especially with a contactless temperature measurement in view of known grilling and cooking devices can be found on page 1 to page 3, first paragraph, of the present specification, and, for the sake of efficiency, are not repeated here.

The art cited in the Office action:

Kurota et al. is directed to a completely different field than the presently claimed invention. In particular, Kurata et al. does not disclose a grilling, nor even a cooking device.

There is no grilling plate or any other object onto which food is directly placed; nor is the Kurota et al. device intended or suited for such. There is also no measurement coil forming an element of a high-frequency circuit with which the temperature may be measured. No indication whatsoever is given in or can be taken from Kurota et al. that a temperature measurement is made other than in the known way with a conventional thermostat.

In Kurata et al., a temperature distribution in a tube to be heated is calculated. This has to be done constantly while the tube continuously passes the heating region (which seems to be a conventional induction coil that heats the tube via heat radiation and does not heat a ferromagnetic tube though the inducing of heat in the tube itself). No tube or plate passes a heating region in the present invention. A grilling plate is heated partly or as a whole and does not move. There is no temperature distribution to be calculated: the parameters of the plate are given and the temperature of the plate is, preferably integrally, measured, which is not and cannot be done with the method or device of Kurata et al.

Dills also does not disclose a grilling device, nor a grilling plate or any plate onto which food is intended to or suited to be directly placed. In Dills, the bottom of a separate pan is heated. This pan is not incorporated in the device as the plate is in a grilling device. The plate in the Dills device is a ceramic plate and is not (directly) heated (see column 3, lines 39/40 and 47). In addition, Dills does not disclose any temperature measurement. Therefore, it must be assumed that a temperature measurement (if any) would have been done in a

conventional way and by no means in a contactless manner.

In fact, Dills actually teaches away from the presently claimed invention: In particular, the object of the Dills cooking device is to provide an inexpensive induction cooking device with low field leakage. This is achieved by providing individual ceramic plates per cooking area instead of one single plate with several cooking areas. In contrast to this, for a grilling device it is characteristic to have one single plate.

Clothier also does not disclose a grilling device with an incorporated grilling plate. Additionally in Clothier, a separate pan for cooking food is disclosed. To optimize the heating of different pans with the same heating device, the pans have an RFID tag with their heating parameters stored therein. The RFID tag of the heating device has heating algorithms stored for the different but defined pans (see column 9, lines 24-26).

In the RFID tag of the pan, information on power steps and the temperatures that are reached therewith are stored. For the parameter measurement and algorithm definition, thermocouples are used (see column 10, line 40). No temperature sensor is present during use and no temperature measurement is performed during use (see column 11, lines 32-35: “*It should be notedwill determine the accuracy and precision of a given temperature regulation...wherein no temperature sensor is employed*”).

With the Clothier method, disadvantages in temperature regulations of state of the art heating devices shall be circumvented by a predefinition of *power steps* for different pans.

No such variability is necessary with only one permanent grilling plate, as in the presently claimed invention (different object -> different solution).

Applicants respectfully note that, with the RFID circuit, no temperature measurements are made or were intended to be made: the tag is defined as being separate and isolated from the hot pan, while the temperature measurement coil is as close as possible to the grilling plate. In addition, with a coil as small as the tag, only local temperature information could be given and a separate temperature switch that prevents or alters transmission of information from the tag (col.4, l.41-43) does not make sense if the tag or coil is to transmit temperature information.

Chaput et al. only discloses different material compositions for ferromagnetic alloys used for induction heating vessels. It is noted that, contrary to an assertion in the Office Action, Chaput et al. does not disclose an aluminum layer sandwiched between stainless steel. Chaput et al. only disclose a multilayered vessel bottom with an aluminum layer and an alloy layer with the *ferromagnetic alloy layer* being sandwiched between stainless steel layers.

Yamazaki et al. is of no further relevance. Yamazaki et al. only discloses a method for printing, e.g. circuit boards, and shows a rectangular induction coil for heating printing paste or a stencil.

Thus, it is respectfully submitted that all of Kurata et al., Dills, Yamazaki et al., Clothier, and Kaput et al. fail to teach or suggest the presently claimed invention.

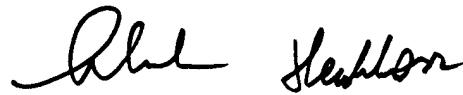
CONCLUSION

For at least the above reasons, none of Kurata et al., Dills, Yamazaki et al., Clothier, nor Kaput et al., alone or in any combination, teach the elements of the presently claimed invention. Thus, it is respectfully submitted that the rejection under 35 U.S.C. §102(b) and the rejections under 35 U.S.C. §103(a) are overcome. Reconsideration and withdrawal thereof are respectfully requested.

Applicant therefore respectfully requests that a timely Notice of Allowance be issued in this case. Favorable consideration and prompt allowance of this application are earnestly solicited. Should the Examiner believe anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

The Director is hereby authorized to charge any necessary fees necessary to preserve the pendency of this application, or credit any overpayment to deposit account No. 50-2929, making reference to Docket No. P27214.

Respectfully submitted,
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